AMENDMENTS TO THE CLAIMS

Claims 1-72 (Canceled)

73. (New) A magnetic random access memory structure comprising:

a plurality of longitudinally extending conductive bit lines formed over an insulating layer of a semiconductor substrate, said plurality of bit lines being spaced apart from each other by a distance of less than about 0.1μm;

respective first magnetic layers over said conductive bit lines; and

a plurality of spaced apart second magnetic layers formed over said plurality of first magnetic layers, wherein each of said first and second magnetic layers independently includes a magnetic material selected from the group consisting of tantalum, nickel-iron, tungsten-nitrogen, nickel, cobalt-nickel-iron, iron, and manganese-iron.

74. (New) The magnetic random access memory structure of claim 73, wherein said plurality of bit lines are spaced apart from each other by a distance of less than about 0.05μm.

75. (New) The magnetic random access memory structure of claim 73 further comprising a nonmagnetic layer between said plurality of first magnetic layers and said plurality of second magnetic layers.

76. (New) The magnetic random access memory structure of claim 75, wherein said nonmagnetic layer comprises a material selected from the group consisting of aluminum oxide, titanium oxide, magnesium oxide, silicon oxide and aluminum nitride.

77. (New) The magnetic random access memory structure of claim 73 further comprising a barrier layer formed between said bit lines and said insulating layer.

78. (New) The magnetic random access memory structure of claim 73, wherein said bit lines comprise copper.

79.. (New) The magnetic random access memory structure of claim 73, wherein said bit lines are longer than 2,000 Angstroms.

80. (New) The magnetic random access memory structure of claim 73, wherein said first magnetic layers have a pinned magnetic orientation.

81. (New) The magnetic random access memory structure of claim 73, wherein said second magnetic layers have a free magnetic orientation.

82. (New) A memory device comprising:

at least one magnetic random access memory cell, said magnetic random access memory cell comprising:

a first ferromagnetic layer formed over a copper bit line;

a second ferromagnetic layer formed over said first ferromagnetic layer;

a nonmagnetic layer between said first and second ferromagnetic layers, said nonmagnetic layer comprising a material selected from the group consisting of aluminum oxide, titanium oxide, magnesium oxide, silicon oxide and aluminum nitride; and

a word line in contact with said second ferromagnetic layer,

wherein said memory cell is arranged so that said copper bit line is spaced from an adjacent copper bit line by a distance of less than or equal to about 0.1 μm.

83. (New) The memory device of claim 82, wherein said copper bit line is spaced from an adjacent bit line by a distance of less than or equal to about 0.05 μm.

84. (New) The memory device of claim 82, wherein said copper bit line is longer than 2,000 Angstroms.

85. (New) The memory device of claim 82, wherein said nonmagnetic layer comprises aluminum oxide.

86. (New) The memory device of claim 82, wherein said first ferromagnetic layer has a pinned magnetic orientation.

87. (New) The memory device of claim 82, wherein said second ferromagnetic layer has a free magnetic orientation.